Chapter 6

General Discussion

Social rejection in its many forms is omnipresent in our daily lives. Whether we are applying for a job, choosing a best friend in school, or flirting with someone in a bar, there is always the chance that the other will not reciprocate our wishes. These incidences of rejection can threaten our need to form and maintain social bonds. Forming and maintaining at least a minimum amount of social bonds provides people with important protective and reproductive benefits (Baumeister & Leary, 1995); therefore, being able to detect signs of rejection seems a crucial ability to guide adjustments in our behavior in order to choose the right partners for bonding, or prevent the break of current relationships. If we were not able to detect signs of rejection, we might not be able to learn how to change our behavior so as to be socially accepted.

Earlier research has shown that people indeed seem to possess an internal gauge that monitors the degree to which they are accepted by others – the *sociometer* (e.g., Leary & Baumeister, 2000; Leary et al., 1995; for a review, see Leary, 2005). Yet, this sensitivity to signs of rejection may come at a price: negative feelings triggered by the sociometer may cause a temporary physical and emotional numbness (DeWall & Baumeister, 2006)[12], which may lead to withdrawal instead of active behavioral adjustment. This sensitivity could make people so vulnerable to rejection that relationships might break up whenever rejection occurs. As this is obviously not the rule of what can be observed in reality, where most people seem to succeed in forming and maintaining social bonds despite of being frequently rejected, the question comes up what the possible mechanisms may be that prevent such withdrawal and promote active coping after rejection.

[12] I did include a measure of mood (namely the Self-Assessment Manikin [SAM] by Lang, 1980) in the two experiments reported in Chapter 2 and indeed could not find any effects of the rejection manipulation on mood, which supports the idea that people might become emotionally numb following rejection.

In my dissertation, I sought to answers this question by focusing on the role of self-esteem and self-beliefs on people's feelings and behavioral tendencies following experiences or threats of rejection. Based on theoretical considerations and previous evidence, I suggested that self-esteem and self-beliefs may be two distinct specializations of the self that each fulfills a different function in response to social rejection. The results support the idea that people's self-esteem may function as a relational monitor to detect signs of possible rejection, especially in the case of being rejected on the grounds of important mate characteristics. In addition, evidence was presented that maintaining positive self-beliefs may be a complementary mechanism that promotes social approach tendencies (e.g. flirting) following rejection. In this final chapter, I review the main findings reported in the empirical chapters and discuss some of their implications.

Self-Esteem as a Mate-Value Meter

One objective of the current studies was to shed more light on the role of self-esteem as a relational monitor. Building on the assumption that mating relationships constitute a particularly important relationship domain, in Chapter 2, I tested the hypothesis that self-esteem may be especially sensitive to information pertaining to one's capacity as a mate. In the first study, participants were given bogus negative feedback following an inventory that ostensibly measured their value as a mate or as a friend. The results of this study showed that self-esteem decreased only after feedback indicating lower value as a mate; when the feedback indicated lower value as a friend, no change in self-esteem occurred. These findings suggest that when it comes to capacity-rejection, self-esteem is indeed especially sensitive to one's value as a

mate. This is not to say that friendship does not matter; however, not succeeding in friendships does not seem to be so threatening as long as people have an average level of success in mating relationships.

From an evolutionary perspective, characteristics that define high mate value differ somewhat for men and women. Men's self-esteem may be influenced especially strongly by rejection due to low competence and status. Rejection on these characteristics may therefore be especially informative of men's value as a mate. For a woman, self-esteem may be influenced especially strongly by rejection due to low physical attractiveness. Rejection on this characteristic may therefore be especially informative of her mate value. I tested this hypothesis in a second study, where I provided participants with feedback indicating low capacity as a mate based on either competence and status, or physical attractiveness. The results of this study revealed that men's self-esteem was indeed only lowered following capacity-rejection based on competence and status, and women's self-esteem was only lowered following capacity-rejection based on their physical attractiveness, suggesting that self-esteem is not sensitive to rejection information in general but also to specific reasons for rejection.

In Chapter 4, I set out to further test the idea that self-esteem is a gauge that detects variations in a person's degree of being desired as a mate. I tested the hypothesis that a person's self-esteem would drop after detecting negative variation in being rejected as a mate by using a speed-dating paradigm. Participants took part in one of three speed-dating events in which they met a number of people from the opposite sex. Men and women rotated to meet each other over a series of short "dates", after which they could accept or reject the other person. In between two sessions of speed-dating, the women got feedback on their number of acceptances and rejections in the first session.

Two acceptances were either added or subtracted from their original score to create situations of unusual acceptance or rejection. The results supported the hypothesis that women who experienced an unusually high number of rejections subsequently reported a drop in their self-esteem. It is noteworthy that whereas in Chapters 2 and 3 rejection was based on feedback that was completely contrived by the experimenters, rejection in the speed-dating study was based on real acceptances and rejections (only in exaggerated form).

Together, these findings extend earlier research showing effects of acceptance and rejection on self-esteem that were not specific to mating relationships or specific characteristics (see Leary, 2005, for an overview). The sociometer may work differently in situations where people feel rejected in a relationship and in situations in which they feel rejected with regard to their capacity for forming the particular kind of relationship. The results suggest that when it comes to capacity rejection, the sociometer is especially attuned for the mating dimension, and that it is especially sensitive to information on characteristics that are most important to one's mate value.

Self-Beliefs as a Motivator for Social Reconnection

A second objective of the current study was to test the hypothesis that positive self-beliefs form a functionally complementary component of the self, one that motivates compensatory approach behavior.

Applying an Error-Management framework to self-beliefs (see Haselton & Nettle, 2006), I hypothesized that holding overly positive beliefs about the self may be an adaptive form of thinking: maintenance of positive beliefs may be essential for motivating functional approach behavior (e.g., tendencies to meet a potential mate), and such beliefs may be especially

beneficial following rejection. In line with that idea, both studies reported in Chapter 2 revealed that people, when experiencing rejection, still believed to be good mates – even while their self-esteem dropped.

In the study described in Chapter 3, I further tested the idea that people do not only hold on to their positive beliefs, but that those beliefs also motivate functional approach. I provided feedback to participants that indicated low value as a mate based on characteristics that are highly relevant or less relevant to mate value for either women or men. Specifically, I provided participants with one of two reasons for rejection: physical attractiveness, or status and competence. I then measured peoples' implicit positive beliefs about their physical attractiveness, and their implicit tendency to approach members of the opposite sex (i.e., their tendency to meet possible new mates). By measuring implicit evaluations and tendencies I was able to capture spontaneous reactions to rejection. Previous research has shown that rejection can impair deliberate decision making following rejection experiences (e.g., Baumeister et al., 2005). Therefore, I expected reactions to rejection to be of a more automatic nature. Furthermore, using automatic tendencies instead of explicit self-reports and behavior also helped to control for factors such as person characteristics (e.g., humor or ambition) that usually influence mate choice (e.g., Buston & Emlen, 2003) or reconnection (e.g., Maner et al., 2007), and it reduced possible effects of social desirability. The results of this study showed that when women's mate value was threatened on the grounds of their physical attractiveness, approach towards men was higher when they held positive associations with their physical attractiveness. This supports the idea that maintaining positive self-beliefs about aspects that are important for one's desirability as a mate may be a defining factor in

determining whether people are motivated to reconnect when facing rejection – at least for women.

The speed-dating study in Chapter 4 replicated this finding for explicit beliefs and actual tendencies to accept someone as a possible mate after experiences of rejection. The findings of this study implicated that especially positive beliefs about important mate characteristics, such as physical attractiveness for women, play an important role in motivating mating efforts. The results showed that women maintain their positive beliefs about being physically attractive in the light of rejection. Furthermore, I found evidence that, if there are changes in women's belief of being physically attractive, it goes together with changes in their willingness to meet potential mates. This supports the idea that positive beliefs may play a role in motivating mating efforts in general, and that thinking about herself as attractive is particularly important to a woman's self-perceived value as a mate.

Finally, in Chapter 5, I looked at a different socially important belief: pro-sociality. It is known that people's self-beliefs are grounded in episodes they can remember in which they showed the positive trait in question. This suggested using the so-called *ease of retrieval* paradigm. Based on earlier research, which showed that people base their perceptions on the difficulty with which belief-related memories come to mind (Schwarz et al., 1991), in two experiments, I created situations in which people experienced it either as easy or difficult to recall their own pro-social deeds. I hypothesized that difficulty to recall their good deeds would pose a threat to people's positive self-belief about prosociality. I also hypothesized that, in the face of threat, people would support the stability of this belief by showing extra prosocial behavior (donating). The results show that when people are threatened in their belief of being pro-social, this belief is maintained and even strengthened as

people take extra efforts to behave prosocially. Thus positive self-beliefs may not be stable because they are unaffected by threat. Rather, they are stable because the individual engages in self-regulatory behavior to maintain the positive belief.

Theoretical Implications

The above findings constitute novel empirical evidence for the assumption that the way we feel and think about ourselves may play an important role in (1) how we evaluate experiences of social rejection, and (2) in whether we are motivated to reconnect afterwards. More specifically, we found evidence for the idea that self-esteem and positive self-beliefs together may form a toolkit to evaluate a person's current relational value—particularly a person's capacity as a mate—and at the same time to motivate compensatory action tendencies. The findings suggest that self-esteem may serve as an affective component of the self that functions as an index of one's relational value; self-beliefs, as positively biased and relatively stable assessments of one's traits and qualities, may serve as a motivator for behavior that promotes social reconnection. In the following, I discuss some of the implications of these findings.

Sociometer Theory and Domain Specificity

The findings of the present dissertation have implications for sociometer theory. Given the importance of being accepted, and the disadvantages and dangers of interpersonal exclusion, sociometer theory suggests that people have evolved an internal gauge to monitor whether their relational value is

high enough to ascertain interpersonal acceptance (Leary & Baumeister, 2000; Leary et al., 1995; for a review, see Leary, 2005).

Presently, it is often discussed whether the sociometer indiscriminately monitors all kinds of social relationships—as has been suggested by Leary's work—or whether there may be multiple domain- and relationship-specific sociometers (Kirkpartick & Ellis, 2001). Related to the latter assumption, recent research by Anthony et al. (2007) has shown that self-esteem is differently attuned to traits that seem important in particularly salient social roles. The evidence presented in this dissertation suggests that, although there are likely to be functionally specific forms of the sociometer, or, alternatively, different sensitivities of a general sociometer to the salience of roles, it seems useful to distinguish a sociometer for social relationships and a sociometer for the capacity to establish and maintain relationships. For reasons of evolutionary primacy, the domain of mating relationships—and one's capacity to establish those—is likely to be so important that a threat to this domain overshadows a threat to other domains, irrespective of the role salience or relational context. Extending earlier research on sociometer effects in non-mating relationships, the present results indeed suggest that self-esteem may be especially sensitive to rejection in the mating domain, and especially sensitive to traits that are most important to one's capacity as a mate. Of course, these results should not be interpreted as saying that friendship does not matter; however, not being able to succeed in friendships does not seem to be so threatening as long as people have an average level of success in mating relationships.

Positive Beliefs as an Adaptive Form of Thinking

It has been proposed that being overly positive about oneself in the light of negative events might be an important form of adaptive thinking (Taylor & Brown, 1988, 1994; Trivers, 2002). By applying an Error-Management framework to positive self-beliefs (Haselton & Nettle, 2006), the present work offers empirical evidence that one of the merits of a positive self-view may lie in its capacity to motivate functional behavior.

A limitation of the current work is that although the results suggest that positive beliefs may be the motivator for functional behavior, it does not provide direct evidence for this causal relationship. Earlier research by Taylor and Gollwitzer (1995) on the relationship between positive beliefs and approach motivation has shown that positive beliefs attenuate when people are in a deliberate mindset and thus in a state of considering potential goals. However, once an individual has selected a certain goal, an implemental mindset emerges together with positive beliefs. This implies that the positive beliefs may be caused by the motivation to fulfill the set goal and not that the positive beliefs precede this motivation. However, this does not rule out the possibility that positive beliefs may be a necessary precondition for actually engaging in pursuing a set goal.

Other research provides additional indication that a positive mindset is necessary for people to actually engage in behavior. Research on motivational processes in the brain implicated that the mesolimbic dopaminergic system may play a role in triggering approach motivation (Denk et al., 2005; Niv, 2007; Tops, 2004). The brain releases dopamine, a neurotransmitter, when an individual expects a reward or obtains an unexpected reward. The general idea is that dopamine-driven processes are functioning in approach motivations towards one's environment, and that

dopamine is released when people are in a positive mindset. Thus for dopamine to be released and motivate approach, people may need to hold positive beliefs first.

Self-Esteem and Self-Beliefs: Two Functionally Distinct Concepts?

As outlined in the introduction, a recent evolutionary theory proposes that the self is a multidimensional concept which as been composed to match various different functional specializations (Kurzban & Aktipis, 2006; Kurzban & Aktipis, 2007). In their theory, the authors suggest that the self serves a primarily social function, particularly designed to assure social inclusion. According to their view, the self consists of a collection of different subsystems—modules—designed by natural selection to enhance a person's reproductive fitness. These individual systems may have evolved for their functionality and they may be informationally encapsulated, making it possible for two systems to hold mutually exclusive representations. The present finding that self-esteem and self-beliefs react differently to social rejection provides empirical evidence that supports the notion that these concepts may be two distinct specializations of the self that each fulfills a different function in response to social rejection. Self-esteem may serve as an affective component of the self that functions as an index of one's relational value; self-beliefs, as positively biased assessments of one's traits and qualities, may serve as a motivator for behavior that promotes social reconnection.

View on Future Research

As I already mentioned in the previous section, one limitation of the current work is that although I could show a clear relationship between the

maintenance of positive beliefs and approach tendencies, I was not able to show a direct causal link between those two concepts. Even though I think that my theoretical considerations and my evaluation of previous findings support the assumption that positive beliefs motivate approach, further research is needed to provide more evidence for this relationship. Furthermore, future research needs to extend these findings to different social areas (e.g., the workplace), and different beliefs (e.g., being a good colleague). Previous research shows that people possess positive beliefs over a wide array of characteristics (e.g., Alicke, 1985; Alicke & Govorun, 2005; Brown, 1986; Dunning et al., 2004), which suggests that they may also exert their motivational influence over different social areas and beliefs.

Another limitation of the research reported in this dissertation is that I mainly focused on women to prove the link between positive beliefs and approach motivation following rejection. Despite much research on the consequences of rejection, surprisingly little is known on the differences in how men and women cope with experiences of mate rejection. Thus, more work is needed to understand how and when positive self-beliefs affect which motives are activated following rejection. Given the promising results for women, I believe that the present findings certainly encourage future research on this topic.

The current findings could have implications for research pertaining to depressive tendencies. Depression can take many forms and differs widely between individuals in its symptomatical expressions. However, some characteristics seem to be quite common: depressed people often feel sad and show a lack of motivation for undertaking action. At the same time, depressed people, compared to mentally healthy people, hold a more realistic perception of themselves and the control they can exert on their environment (Alloy &

Abrahamson, 1988; Taylor & Brown, 1988). The present work could offer an explanation for the inactivity observed in people who suffer from a depression. Depression often occurs after people experienced distressing changes in their lives, such as the death of a loved one or a break-up of a meaningful relationship. If people lack positive beliefs pertaining characteristics that seem relevant in the specific distressing incident, it is possible that depressive symptoms and perhaps even more severe forms of depression are brought about by social rejection. The finding that positive beliefs seem to be related to action tendencies and the fact that depressed people seem to lack such self-perceptions points in this direction. However, this conjecture is as of yet speculative, and more research is needed to investigate whether the observed pessimism in depressed people is related to their tendency for being passive.

Finally, this work has implications for social network research. Although the presented work mainly focused on the specific context of rejection in romantic relationships, and the findings suggest that this may be a particularly important relationship domain, this is of course not the only domain wherein rejection occurs. People can also be rejected by their colleagues at the workplace, or even earlier as children by their parents or peers. Generally, the current findings suggest that rejection may not necessarily break a social tie as long as the rejection is not based on an important characteristic for the relational context. If it is based on a relevant characteristic, the current findings suggest that an important question should be whether the person is able to uphold positive beliefs regarding this aspect. If, for example, peers frequently bully a child, the question may be whether the child is able to maintain his positive beliefs about being a good classmate or friend for long without help from others, and subsequently, what the

processes are that help the child to maintain these positive beliefs. It may not only be important that other friends defend the child against being bullied, but also that they help each other in upholding positive beliefs about being a good friend and classmate. By doing so, they may prevent each other from becoming socially isolated. Recent research on parental rejection in early adolescence has shown that peer acceptance partly buffers for negative consequences (e.g., depression) of parental rejection (Sentse, Lindenberg, Omvlee, Ormel, & Veenstra, 2008), which suggests that acceptance by others may indeed help to uphold positive beliefs. Therefore, future research after social network processes may benefit from considering a person's self-evaluations and their possibly social source in assessing implications of network structures and dynamics.

Conclusion

To conclude, in this dissertation, I aimed to investigate the specific role of the self in social rejection. I tested the idea that self-esteem and positive self-beliefs together may form a toolkit to evaluate a person's current relational value and at the same time to motivate compensatory action tendencies following experiences of rejection. The current findings suggest that self-esteem and self-beliefs may indeed be two distinct functional specializations of the self: self-esteem seems to serve as an affective component that functions as an index especially of one's mate value; self-beliefs seem to serve as a motivator for behavior that promotes social reconnection. Together these findings suggest that next time someone rejects you, even if you feel bad about yourself and reality weights heavy on you: Choose the blue pill and keep thinking positive!